

Docket No. 239546US0CONT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Hirokazu OHBAYASHI, et al.

SERIAL NO: New Application

GAU:

FILED: Herewith

EXAMINER:

FOR: ENZYME-PROTEIN COMPLEX

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

- ☒ The applicant(s) wish to make of record the references listed on the attached form PTO-1449 and cited in the attached European Search Reports. Copies of the listed references were previously filed in the parent application serial no. 09/740,903 filed on December 21, 2000.
- ☐ A check is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

- ☐ Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- ☐ A check is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

- ☐ Each item of information contained in this information disclosure statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

- ☒ Please charge any additional fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon

Registration No. 24,618



22850

Tel. (703) 413-3000
Fax. (703) 413-2220
(OSMMN 05/03)

Thomas M. Cunningham
Registration No. 45,394

Docket No. 239546US0CONT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Hirokazu OHBAYASHI, et al.

SERIAL NO: New Application

GAU:

FILED: Herewith

EXAMINER:

FOR: ENZYME-PROTEIN COMPLEX

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

- ☒ The applicant(s) wish to make of record the references listed on the attached form PTO-1449 and cited in the attached European Search Reports. Copies of the listed references were previously filed in the parent application serial no. 09/740,903 filed on December 21, 2000.
- ☐ A check is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

- ☐ Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- ☐ A check is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

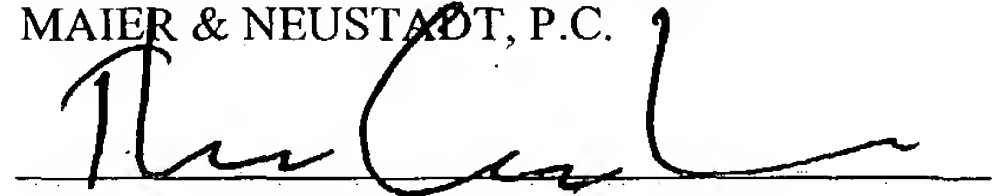
- ☐ Each item of information contained in this information disclosure statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

- ☒ Please charge any additional fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon

Registration No. 24,618



22850

Tel. (703) 413-3000
Fax. (703) 413-2220
(OSMMN 05/03)

Thomas M. Cunningham
Registration No. 45,394

| | | | | | | | |
|--|----|---|----------|---|-----------------------|-------------------------------|-------------------------------|
| Form PTO 1449 (Modified) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY DOCKET NO. 239546USOCONT | | SERIAL NO. New Application | |
| LIST OF REFERENCES CITED BY APPLICANT | | | | APPLICANT Hirokazu OHBAYASHI, et al. | | | |
| | | | | FILING DATE Herewith | | GROUP | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FILING DATE IF APPROPRIATE |
| | BB | US-6252053 | 6/02 | OHBAYASHI, et al. | | | |
| | AB | | | | | | |
| | AC | | | | | | |
| | AD | | | | | | |
| | AE | | | | | | |
| | AF | | | | | | |
| | AG | | | | | | |
| | AH | | | | | | |
| | AI | | | | | | |
| | AJ | | | | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | | |
| | | DOCUMENT NUMBER | DATE | COUNTRY | TRANSLATION YES NO | | |
| | BC | 59-220199 | 12/11/84 | JAPAN (with corr. EP 0 122 028) | | | X |
| | BD | 0 122 028 | 10/17/84 | EUROPE | | | |
| | BE | WO 97/14028 | 04/17/97 | WIPO | | | |
| | BF | 0 123 300 | 10/31/84 | EUROPE | | | |
| | BG | 0 155 224 | 9/18/85 | EUROPE | | | |
| | BH | 0 269 451 | 6/1/88 | EUROPE | | | |
| | BI | 0 151 492 | 8/14/85 | EUROPE | | | |
| | BJ | EP 0 992 794A2 | 4/12/00 | EUROPE | | | |
| OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.) | | | | | | | |
| | BK | K. FUJIWARA, et al., Journal of Immunological Methods, vol. 110, pages 47 - 53, "THE USE OF N-[β -(4-DIAZOPHENYL)ETHYL]MALEIMIDE AS A COUPLING AGENT IN THE PREPARATION OF ENZYME-ANTIBODY CONJUGATES", 1988 | | | | | |
| | BL | C. A. ROWE, et al., Anal. Chem., vol. 71, pages 3846 - 3852, "ARRAY BIOSENSOR FOR SIMULTANEOUS IDENTIFICATION OF BACTERIAL, VIRAL, AND PROTEIN ANALYTES", 1999 | | | | | |
| | BM | S. S. GHOSH, et al., Bioconjugate Chem., vol. 1, pages 71 - 76, "USE OF MALEIMIDE-THIOL COUPLING CHEMISTRY FOR EFFICIENT SYNTHESSES OF OLIGONUCLEOTIDE-ENZYME CONJUGATE HYBRIDIZATION PROBES", 1990 | | | | | |
| Examiner | | | | Date Considered | | | |
| *Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | | | | | | | |

| | | | | | | | |
|--|-----|---|----------|---|--|-------------------------------|-------------------------------|
| Form PTO 1449 (Modified) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY DOCKET NO. 239546US0CONT | | SERIAL NO. New Application | |
| LIST OF REFERENCES CITED BY APPLICANT | | | | APPLICANT Hirokazu OHBAYASHI, et al. | | | |
| | | | | FILING DATE Herewith | | GROUP | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FILING DATE IF APPROPRIATE |
| | AA | 5,057,313 | 10/15/91 | L.B. SHIH, et al. | | | |
| | AB | 5,658,741 | 08/19/97 | W.E. BOLTON, et al. | | | |
| | AC | 5,053,520 | 10/01/91 | C. BIENIARZ, et al. | | | |
| | AD | 5,084,560 | 01/28/92 | K.E. HELLSTROM, et al. | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | | |
| | | DOCUMENT NUMBER | DATE | COUNTRY | TRANSLATION YES NO | | |
| | AE | 10-084959 | 04/07/98 | JAPAN (English Abstract Only) | | | |
| | AF | 7-216000 | 08/15/95 | JAPAN (English Abstract Only) | | | |
| | AG | WO 95/24631 | 09/14/95 | WIPO (English Abstract Only) | | | |
| | AH | 63-503138 | 11/17/88 | JAPAN (with corr. WO 87/05031) | | | X |
| | AI | WO 87/05031 | 08/27/87 | WIPO | | | |
| | AJ | 3-158758 | 07/08/91 | JAPAN (with English Abstract) | | | X |
| | AK | 6-509167 | 10/13/94 | JAPAN (with corr. WO 93/01498) | | | X |
| | AL | WO 93/01498 | 01/21/93 | WIPO | | | |
| OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.) | | | | | | | |
| | AM | Derwent Publications, AN 1990-286254, JP 02 201162, August 9, 1990 | | | | | |
| | AN | Derwent Publications, AN 1991-196013, JP 03 089165, April 15, 1991 | | | | | |
| | AO | Derwent Publications, AN 1991-153208, JP 03 089164, April 15, 1991 | | | | | |
| | AP | Derwent Publications, AN 1990-113509, JP 02 066459, March 6, 1990 | | | | | |
| | AQ | Derwent Publications, AN 1986-281802, JP 61-205863, September 12, 1986 | | | | | |
| | AR | Derwent Publications, AN 1984-034233, JP 58-225028, December 27, 1983 | | | | | |
| | AS | Pierce Catalog Handbook, 13 pages, "TECHNICAL SECTION," 1994-1995 | | | | | |
| | AT | A.H. BLAIR, et al., Journal of Immunological Methods, Vol. 59, pps. 129-143, "LINKAGE OF CYTOTOXIC AGENTS TO IMMUNOGLOBULINS," 1983 | | | | | |
| | AU | R.P. HAUGLAND, Methods in Molecular Biology, Vol. 45, pps. 235-243, "COUPLING OF MONOCLONAL ANTIBODIES WITH ENZYMES," 1995 | | | | | |
| | AV | E. ISHIKAWA, et al., Journal of Immunoassay, Vol. 4, No. 3, pps. 209-327, "ENZYME-LABELING OF ANTIBODIES AND THEIR FRAGMENTS FOR ENZYME IMMUNOASSAY AND IMMUNOHISTOCHEMICAL STAINING," 1983 | | | | | |
| | AW | S. HASHIDA, et al., Journal of Applied Biochemistry, Vol. 6, pps. 56-63, "MORE USEFUL MALEIMIDE COMPOUNDS OF THE CONJUGATION OF FAB' TO HORSE RADISH PEROXIDASE THROUGH THIOL GROUPS IN THE HINGE," 1984 | | | | | |
| | AX | P.K. NAKANE, et al., The Journal of Histochemistry and Cytochemistry, Vol. 14, No. 12, pps. 929-931, "ENZYME-LABELED ANTIBODIES: PREPARATION AND APPLICATION FOR THE LOCALIZATION OF ANTIGENS," 1967 | | | | | |
| | AY | P.K. NAKANE, et al., The Journal of Histochemistry and Cytochemistry, Vol. 22, No. 12, pps. 1084-1091, "PEROXIDASE-LABELED ANTIBODY A NEW METHOD OF CONJUGATION," 1974 | | | | | |
| | AZ | Z.-R. SHI, et al., The Journal of Histochemistry and Cytochemistry, Vol. 36, No. 3, pps. 317-322, "A COMPARISON OF THREE IMMUNOPEROXIDASE TECHNIQUES FOR ANTIGEN DETECTION IN COLORECTAL CARCINOMA TISSUES," 1988 | | | | | |
| | AAA | R. GIORNO, Diagnostic Immunology, Vol. 2, pps. 161-166, "A COMPARISON OF TWO IMMUNOPEROXIDASE STAINING METHODS BASED ON THE AVIDIN-BIOTIN INTERACTION," 1984 | | | | | |
| Examiner | | | | | Date Considered | | |
| *Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | | | | | | | |